

产品规格承认书

Specification for approval

客户名称:

Customer: 睿森尚

产品名称

贴片保险丝

Product Name:

SMD FUSE

规格型号:

Specification Type: SBT T10A250V 2410

客户料号:

Customer Part No.: _____

供应商:

东莞市诚润电子科技有限公司

Supplier:

Dongguan Chevron Electronic Technology Co.,Ltd

供应商地址:

广东省东莞市厚街镇宝宏路鼎昊高新科技产业园 D 栋二楼

Supplier Address:

2nd FLOOR of D BUILDING ,No. 29 BAOHONG ROAD, DINGHAO HIGH-NEW
TECHNOLOGY INDUSTRIAL PARK, HOUJIE 523961, GUANGDONG,CHINA

编制 Prepared	审核 Checked	批准 Approved
杜雨	陈正根	方剑

编制 Prepared	审核 Checked	批准 Approved

供方签章:

SUPPLIER:

日期: 2021.8.3

DATE:



需方签章:

CUSTOMER:

日期:

DATE:

1. 适用范围 / Scope of Application

本产品适用于 LCD / PDP 电视. 液晶显示器. LCD / PDP 面板. LCD 背光逆变器. 便携式 DVD 播放器. 电源. 联网. PC 服务器. 冷却风扇系统. 存储系统. 电信系统. 无线基站. 白色家电. 游戏机. 办公自动化. 设备. 电池充电电路保护. 工业设备. 医疗器材. 汽车各类电子设备电路的过流保护作用.

This product is suitable for LCD / PDP TV. LCD display. LCD / PDP panel. LCD backlight inverter. Portable DVD player. Power supply. Networking. PC server. Cooling fan system. Storage system. Telecommunication system. Wireless base station. . Game machine. Office automation. Equipment. Battery charging circuit protection. Industrial equipment. Medical equipment. Over-current protection of various electronic equipment circuits.

2. 安规认证标准及编号 / Standards and Agency Approvals

2.1 执行标准: 遵循 60127/GB9364/UL248-14。

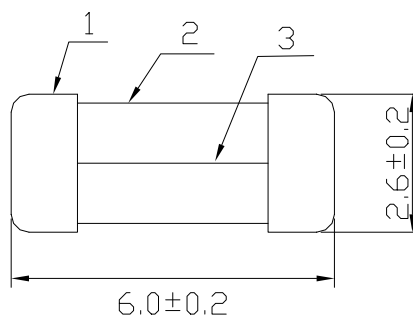
Standards: In accordance with 60127/GB9364/UL248-14.

2.2 认证范围 Certification:

额定电压 Rated Voltage	安规标准 Agency	认证电流 Ampere Range	证书编号 Agency File Number
250V	UR-CUR	50mA ~ 10A	E358589
	VDE	500mA/1A/2A/3.15A/5A	40049351
	CQC	500mA/1A/2A/3.15A/5A	CQC19012215943
	KC	500mA/1A/2A/3.15A/5A	SU05044-19001A SU05044-19002A SU05044-19003A

3. 结构及尺寸 / Dimensions and Structure

单位: 毫米 / Unit: mm



4. 材料明细 / Material Details

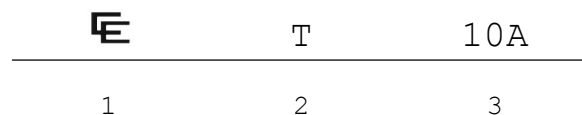
编号 NO.	零件名称 Part Name	材质 Material
1	铜帽 Cap	铜镀银 Ag Plated Brass
2	管体 Body	陶瓷管 Body
3	熔丝 Element	合金 Alloy

5. 产品标示 / Product Marking

保险丝两端铜帽上或本体上需有下列标示。

The fuses cap or fuse body shall have the following markings.

示例 Example:







1. 制造厂商标识/ Chevron Logo
2. 电器特性符号/ Electrical Characteristic symbol
3. 额定电流/Rated Current: A 或 or mA

注意 / Note: 对于标示的大小和位置没有规定。

Size and position of the markings shall not be provided

6. 产品特性/Product Characteristic

Rated current	Rated voltage	Maximun voltage drop (mv)	Breaking capacity	I ² T A ² s				
50mA	250V	5000	50A	0.01	●	○	○	○
62mA		4400		0.01	●	○	○	○
100mA		3500		0.03	●	○	○	○
125mA		2500		0.06	●	○	○	○
160mA		2200		0.08	●	○	○	○
200mA		1800		0.09	●	○	○	○
250mA		1400		0.11	●	○	○	○
315mA		1300		0.14	●	○	○	○
400mA		1000		0.26	●	○	○	○
500mA		900		0.46	●	●	●	●
630mA		800		0.8	●	○	○	○
800mA		600		2.3	●	○	○	○
1.0A		500		3.1	●	●	●	●
1.25A		400		3.2	●	○	○	○
1.5A		300		4.7	●	○	○	○
1.6A		300		5.9	●	●	●	●
2.0A		300		7.8	●	○	○	○
2.5A		300		14.3	●	○	○	○
3A		300		25.2	●	●	●	●
3.15A		300		25.3	●	○	○	○
3.5A	300	26	●	○	○	○		
4.0A	300	31.4	●	●	●	●		
5.0A	300	58.3	●	○	○	○		
6.3A	300	99	●	○	○	○		
7A	220	105.6	●	○	○	○		
8.0A	220	120.2	●	○	○	○		
10.0A				141.2	●			

●Approved ○pending

7. 外观及形状 / Appearances and Configuration

7.1 外观不应出现显著的污点、裂纹，标识应该容易辨识。

There shall not be any remarkable stain and crack on the appearances, markings shall be easily legible.

7.2 形状：方形陶瓷贴片保险丝。

Configuration: Square ceramic patch fuse

8. 产品特性 / Product Characteristics

8.1 引脚拉力强度 / Lead Pull Strength

10 牛顿 10±1 秒 / 10N for 10±1 Seconds

8.2 引脚推力强度 / Lead Thrust Strength

2 牛顿 10±1 秒 / 2N for 10±1 Seconds

9. 电气特性 / Electrical Characteristics

9.1 实验条件: Test Condition

所有测试环境温度为 25±5℃。

All electrical test is to be conducted with the ambient air at a temperature of 25±5℃.

9.2 分断能力 / Interrupting Rating:

分断能力 Breaking Capacity::

50A 使用 250 伏交流电源(50mA~10A);200A@63V/72V(12A~20A)。

50 A@ 250V AC(50mA~10A); 200A@63V/72V(12A~20A)

9.3 温度上升试验 / Rising Temperature Test:

温度上升试验: 通 1.0 倍额定电流, 当温度稳定时 (5 分钟测量 4 次, 且每次测量值

与平均值相差不超过 2℃)。测得熔断体任何部位的温升不得超过 75℃, 周围环境温度为 25±5℃。

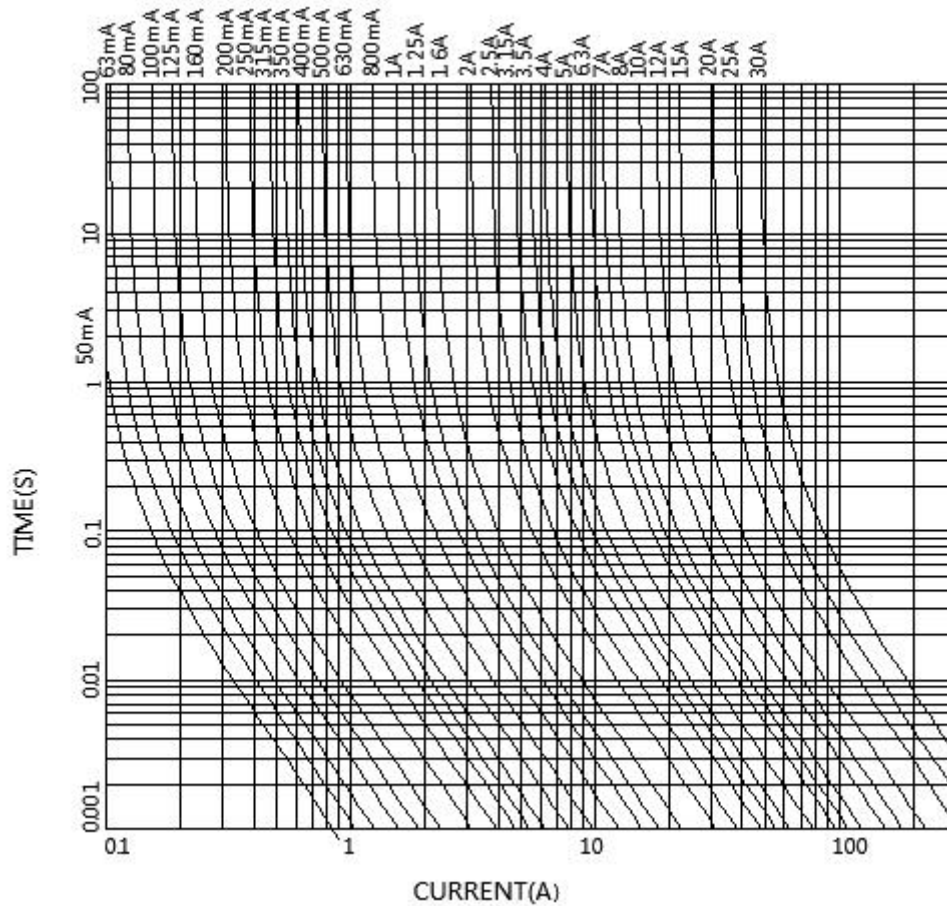
When the 100% times of rating electric current passes the fuse, After reaching thermal balance , the temperature on the fuse surface rising is not higher than 75℃

Rising temperature= The surface temperature-Ambient temperature

9.4 熔断时限 / Opening Time

额定电流的%% of Ampere Rating	熔断时间 Opening Time (Time lag)
100%	T>4hrs
200%	T<120s
300%	200ms<T<3s
800%	2ms<T<100ms

9.5 平均时间电流曲线图 / Average Time Current Curves



10. 环境特性 / Environmental Characteristic

10.1 使用温度范围 / Operating Temperature

-55℃~+125℃。

10.2 保存条件 Stock Condition

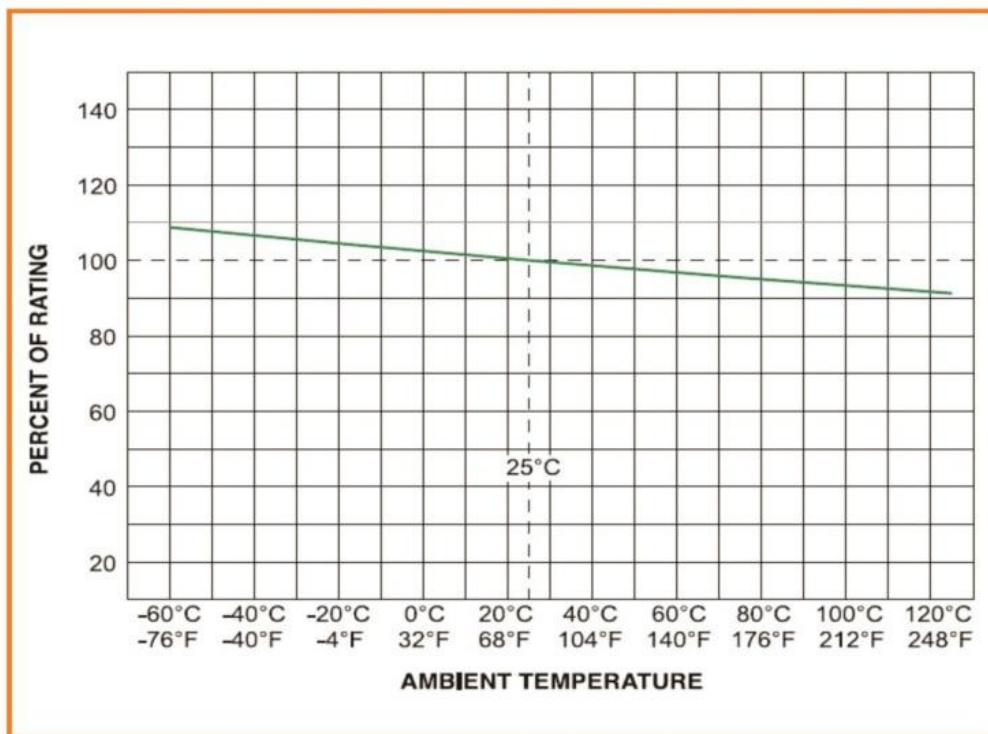
湿度：相对湿度 $\leq 75\%$ 平均可以存放 3 年。

Humidity: Relative humidity $\leq 75\%$ store 3 years in average.

10.3 若操作环境温度超出 $25\pm 5^\circ\text{C}$ 范围，在选用保险丝规格时，需考虑操作环境温度对保险丝的影响，请参照如下：温度-电流曲线图。

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from 20~30°C, engineer should consider the environmental temperature's affection to fuses. Please refer: Temperature Rerating Curve:

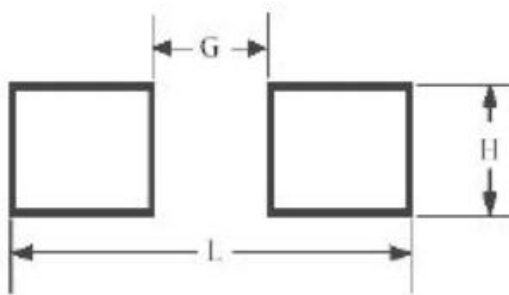
Temperature Rerating Curve



11. 安装建议 / Installation Recommendations

11.1 建议按照如下示意图方式进行安装。

Propose installation way as following picture.



/	mm	inch
L	8.7	0.343
H	2.9	0.114
G	3.0	0.118

11.2 建议焊接参数 / Recommended Soldering Parameters

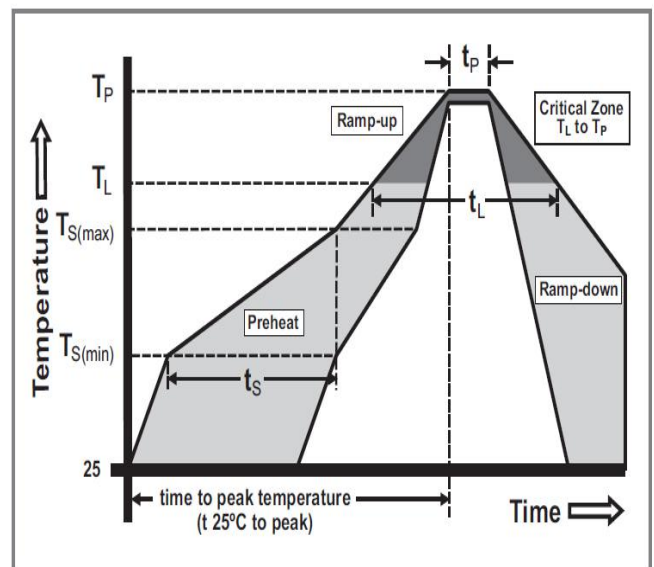
A.回流焊/Infrared Reflow 温度 Temperature 250°C ; 时间 Time 5sec Max;

B.波峰焊/ Wave soldering : 温度 Temperature 250°C ; 时间 Time 10sec Max;

C.烙铁焊/Hand Soldering: 温度 Temperature 300°C ; 时间 Time 2sec Max

烙铁避免接触铜帽 Soldering iron avoid touch Copper cap

Profile Feature	Pb-Free assembly
Average Ramp-up Rate (Tsmax to Tp)	3°C/sec Max.
Preheat Temperature Min Ts(min)	150°C
Temperature Max Ts(max)	200°C
Time(Tsmin to Tsmax)	60-120 sec
Peak Temperature(Tp)	250°C
Time within 5 °C of actual Peak Temperature(Tp)	5 sec
Melting tin time(TL)	20sec~40sec
Ramp-down Rate	6°C/sec Max
Time 25°C to peak Temperature	8minutes Max



回流焊接参考温度 Recommend Reflow profile

12. 包装 / Packaging

12.1 包装袋/盒印明下列标示: / The following items indicated on the label:

产品料号、额定(电压、电流)、分断类型及安规名称。

Catalog number, ratings (voltage, current), interrupting type and safety mark.

包装材料均符合 ROHS/REACH/HF 的环保要求, 且包装材料不会和零件发生化学反应, 造成不良。

The packing material conforms to ROHS/REACH/HF environmental protection request. And the packing materials will not have the chemical reaction with the components.

12.2 包装数量 / Packing Quantity

每 1500pcs 一卷/Every 1500 PCS for 1 roll

每盒 1 卷/Each box 1 volume

